

WHAT IS CLAIMED IS:

1. A cleaning apparatus comprising:  
a cleaning member by for collecting toner;  
toner carrying means for carrying the collected  
5 toner contacting with a surface of an image bearing  
body for bearing a toner image; and  
a toner breaking member disposed in the vicinity  
of a contact portion between said image bearing body  
and said cleaning member for breaking the toner in the  
10 vicinity of said contact portion,  
wherein said toner breaking member moves in  
association with a toner conveying operation of said  
toner conveying means.
- 15 2. A cleaning apparatus according to claim 1,  
wherein at least a part of said toner breaking member  
is disposed in a position where said part interferes  
with said toner conveying means.
- 20 3. A cleaning apparatus according to claim 2,  
wherein said toner conveying means has a conveying  
screw, and said toner breaking member is disposed so as  
to interfere with a rotational region of said conveying  
screw.
- 25 4. A cleaning apparatus according to claim 3,  
wherein said toner breaking member has a plurality of

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free end portions, and said plurality of free end portions interfere with the rotational region of said conveying screw.

5           5. A cleaning apparatus according to claim 1, wherein said cleaning member has a coating layer formed of a material with higher hardness than that of a base member forming said cleaning member at a contact portion at least with said image bearing body.

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6. A cleaning apparatus according to claim 5, wherein said coating layer is made of nylon in which carbon fluoride is dispersed.

15           7. A cleaning apparatus according to claim 1, further comprising toner receiving means disposed on the upstream side in the image bearing body moving direction of a contact portion between said image bearing body and said cleaning member for receiving the  
20 toner collected by said cleaning member.

8. A cleaning apparatus according to claim 2, further comprising cleaning member moving means for holding said cleaning member and moving in  
25 reciprocation in a longitudinal direction of the image bearing body,

wherein said toner breaking member is coupled

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with said cleaning member moving means.

9. A cleaning apparatus according to claim 5,  
wherein said base member is made of polyurethane.

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10. A cleaning apparatus comprising:

a cleaning member for collecting toner by  
contacting with a surface of an image for bearing  
member bearing a toner image;

10 cleaning member moving means for holding said  
cleaning member and moving in reciprocation in a  
longitudinal direction of the image bearing body;

a toner breaking member coupled with said  
cleaning member moving means and disposed in the  
15 vicinity of a contact portion between said image  
bearing body and said cleaning member for breaking the  
toner in the vicinity of said contact portion; and  
toner conveying means for conveying the collected  
toner,

20 wherein at least a part of said toner breaking  
member is arranged in a position where said part  
interferes with said toner conveying means.

11. A cleaning apparatus according to claim 10,  
25 wherein said toner conveying means includes a conveying  
screw, and

said toner breaking member is arranged so as to

interfere with a rotational region of said conveying screw.

12. A cleaning apparatus according to claim 11,  
5 wherein said toner breaking member has a plurality of free end portions, said plurality of free end portions interfere with the rotational region of said conveying screw.

10 13. A cleaning apparatus according to claim 10, wherein said cleaning member has a coating layer formed of a material with higher hardness than that of a base member forming said cleaning member at a contact portion at least with said image bearing body.

15 14. A cleaning apparatus according to claim 13, wherein said coating layer is made of nylon in which carbon fluoride is dispersed.

20 15. A cleaning apparatus according to claim 10, further comprising toner receiving means disposed on the upstream side in the image bearing body moving direction of a contact portion between said image bearing body and said cleaning member for receiving the  
25 toner collected by said cleaning member.

16. A cleaning apparatus according to claim 13,

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wherein said base member is made of polyurethane.

17. An image forming apparatus comprising:

image forming means for forming a toner image on  
5 a surface of an image bearing body;

transfer means for transferring the toner image  
on said image bearing body to a recording material;

a cleaning member contacting with a surface of  
said image bearing body for collecting toner;

10 toner conveying means for conveying the collected  
toner; and

a toner breaking member disposed in the vicinity  
of a contact portion between said image bearing body  
and said cleaning member for breaking the toner in the  
15 vicinity of said contact portion,

wherein said toner breaking member moves in  
cooperation with a toner conveying operation of said  
toner conveying means.

20 18. An image forming apparatus according to claim  
17, wherein at least a part of said toner breaking  
member is located in a position where said part  
interferes with said toner conveying means.

25 19. An image forming apparatus according to claim  
18, wherein said toner conveying means includes a  
conveying screw, and

said toner breaking member is arranged so as to interfere with a rotational region of said conveying screw.

5           20. An image forming apparatus according to claim 19, wherein said toner breaking member has a plurality of free end portions, and said plurality of free end portions interfere with the rotational region of said conveying screw.

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          21. An image forming apparatus according to claim 19, wherein said cleaning member has a coating layer formed of a material with higher hardness than that of a base member forming said cleaning member at a contact  
15           portion at least with said image bearing body.

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          22. An image forming apparatus according to claim 21, wherein said coating layer is made of nylon in which carbon fluoride is dispersed.

          23. An image forming apparatus according to claim 17, further comprising toner receiving means disposed on the upstream side in the image bearing body moving direction of a contact portion between said image  
25           bearing body and said cleaning member for receiving the toner collected by said cleaning member.

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24. An image forming apparatus according to claim  
18, further comprising cleaning member moving means for  
holding said cleaning member and moving in  
reciprocation in a longitudinal direction of the image  
5 bearing body,

wherein said toner breaking member is coupled  
with said cleaning member moving means.

25. An image forming apparatus according to claim  
10 21, wherein said base member is made of polyurethane.

26. An image forming apparatus comprising:  
image forming means for forming a toner image on  
a surface of an image bearing body;  
15 transfer means for transferring the toner image  
on said image bearing body to a recording material;  
a cleaning member contacting with a surface of  
said image bearing body for collecting toner;  
cleaning member moving means for holding said  
20 cleaning member and moving in reciprocation in a  
longitudinal direction of the image bearing body;  
a toner breaking member coupled with said  
cleaning member moving means and disposed in the  
vicinity of a contact portion between said image  
25 bearing body and said cleaning member for breaking the  
toner in the vicinity of said contact portion; and  
toner conveying means for conveying the collected

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toner,

wherein at least a part of said toner breaking member is located in a position where said part interferes with said toner conveying means.

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27. An image forming apparatus according to claim 26, wherein said toner conveying means includes a conveying screw, and said toner breaking member is arranged so as to interfere with a rotational region of  
10 said conveying screw.

28. An image forming apparatus according to claim 27, wherein said toner breaking member has a plurality of free end portions, and said plurality of free end  
15 portions interfere with the rotational region of said conveying screw.

29. An image forming apparatus according to claim 26, wherein said cleaning member has a coating layer  
20 formed of a material with higher hardness than that of a base member forming said cleaning member at a contact portion at least with said image bearing body.

30. An image forming apparatus according to claim 29, wherein said coating layer is made of nylon in  
25 which carbon fluoride is dispersed.

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31. An image forming apparatus according to claim  
26, further comprising toner receiving means disposed  
on the upstream side in the image bearing body moving  
direction of a contact portion between said image  
5 bearing body and said cleaning member for receiving the  
toner collected by said cleaning member.

32. An image forming apparatus according to claim  
29, wherein said base member is made of polyurethane.

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